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## Japan

### Solid Wood Products

### Annual

### 2003

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**Report Highlights:**

Economic recession and deflation in the real estate and housing markets reduced housing starts in 2002 to 1,151,016 units, down 1.9% from the previous year. In 2003, housing starts are up slightly, suggesting that while the market remains bearish, homebuyers are beginning to respond to low housing prices and loan rates. The July 1, 2003, implementation of formaldehyde testing requirements have had an effect on trade, especially plywood. Japanese imports of softwood lumber and manufactured wood products from Europe were up 36.4% or 1,484,020 m<sup>3</sup>, with Finland, Sweden, Austria, and Germany the leading suppliers. Structural glulam imports were a record 516,062 m<sup>3</sup>, of which, 84%, 433,599 m<sup>3</sup>, was from Europe.

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## Executive Summary

Japanese housing starts in 2002 were 1,151,016 units, down 1.9% from the previous year. Economic recession and deflation in the real estate and housing markets reduced building activities as many prospective homebuyers took a wait-and-see attitude to buying or building a new home. Housing starts through June 2003 were up, 0.2%, to 566,793, from the same period a year earlier. Market observers have concluded that while the market remains bearish, homebuyers are beginning to respond to low housing prices and loan rates.

Implementation on July 1, 2003 of new regulations restricting the emission of volatile chemical substances, sick house regulations, by the Ministry of Land, Infrastructure and Transportation (MLIT) had significant trade ramifications. The requirements include testing for formaldehyde on a variety of products, including plywood, particleboard, laminated veneer lumber, laminated wood products, finger-jointed lumber, wood window sashes, and doors. Testing will be covered under Japan Agricultural Standards (JAS), regulating most wood products, Japan Industrial Standards (JIS), regulating most industrial materials, and the under the BSL, for products not covered by JAS or JIS.

Japanese imports of softwood lumber and manufactured wood products from Europe during the first half of 2003 (January-June) were 1,484,020 m<sup>3</sup>, up 36.4% from the same period last year. Year-to-date production through June 2003 was 6,887,000 m<sup>3</sup>, up 31,000 m<sup>3</sup> from the same period last year. Domestic lumber distribution in 2002 was 14,402,000 m<sup>3</sup>, down 7.0% from the previous year. Year-to-date lumber shipments through June 2003 were 6,818,000 m<sup>3</sup>, down 4.1% from the same period last year. As a result of continued economic difficulties, distribution is expected to remain depressed during the remainder of this year.

Structural glulam imports were more than 500,000 m<sup>3</sup> for the first time in 2002. The record 516,062 m<sup>3</sup> was up 3.6% from the previous year. Of this, 84%, 433,599 m<sup>3</sup>, was from Europe. This was up 13.4% from 2001. Meanwhile, the U.S. share was 3.8%, 19,841 m<sup>3</sup>, in 2002, down 35% the previous year. The top 5 suppliers were Austria, Finland, Sweden, Germany and Russia. Japanese laminated wood production in 2002 was a record 1,172,800 m<sup>3</sup>, up 14.0% from the previous year.

Japanese imports of furniture and associated component parts in 2002 were down 1.7% to \$2.1 billion from the previous year. Wood furniture imports declined 7.3%, from \$690 million in 2001 down to \$640 million in 2002. China, Thailand, Malaysia, Italy and Indonesia were the leading wood furniture suppliers, accounting for 75% of the market share of imports. In response to growth high quality cost-competitive imports, Japanese furniture manufacturers have shifted significant production offshore. This has left management decisions continuing to be made in Japan while taking advantage of production efficiencies in developing countries.

Potential U.S. export opportunity as builders shift from composite wood flooring to solid temperate hardwood. Production of composite wood flooring during the first half of 2003 was 30,608,000 m<sup>2</sup> (8,502,000 Tsubo), down 6% from the same period last year. This decline is the result of both decreased housing starts and companies marketing solid temperate hardwood flooring in response to customer preferences. While both quality and price competitiveness remain a factor for successful marketing in this sector, it promises to be a worthwhile target for U.S. solid temperate hardwood products.

## Strategic Indicator Tables

<b>STRATEGIC INDICATOR TABLE 1: CONSTRUCTION MARKET</b>			
Country: Japan Report Year: 2003	Previous Calendar Year	Current Calendar Year	Following Calendar Year
<b>Total Housing Starts (number of units)</b>	1,151,016	1,150,000	1,160,000
--Of which, wood frame	503,761	503,000	507,000
--Of which, steel, masonry, other materials	647,255	647,000	653,000
--Of total starts, residential	1,119,426	1,118,400	1,125,000
---Of residential, single family	488,296	487,800	490,700
---Of residential, multi-family	662,720	662,200	669,300
--Of total starts, commercial	31,590	34,000	35,000
<b>Total Value of Commercial Construction Market (\$US million)</b>	114,558	115,000	117,000
<b>Total Value of Repair and Remodeling Market (\$US million)</b>	N/A	N/A	N/A
Are tariffs on softwood from the United States higher, equal or lower than softwood imported from other countries? 1/	Equal	Equal	Equal
Are tariffs on plywood from the United States higher, equal or lower than plywood imported from other countries? 1/	Equal	Equal	Equal
Are non-tariff barriers on softwood from the United States higher, equal or lower than softwood imported from other countries? 1/	Equal	Equal	Equal
Are non-tariff barriers on plywood from the United States higher, equal or lower than plywood imported from other countries? 1/	Equal	Equal	Equal
Are there market development programs for construction, softwood or plywood imports funded by foreign governments?	No.	No.	No.
If yes, identify the following:			
--Country	N/A	N/A	N/A
--Form(s) of competition: Export subsidy, trade show, trade servicing, permanent market representative (number), permanent office (location), or other. 2/	N/A	N/A	N/A
--Estimated annual market expansion outlay (\$US million) by country	N/A	N/A	N/A
Is the acceptability of U.S. style timber frame construction (i.e., per building codes, mortgage availability, etc.) high, medium or low? 3/	High	High	High
Are consumer preferences for solid wood materials vis-à-vis non-wood materials in construction high, medium or low? 3/	High	High	High
From Post's experience, is the willingness of U.S. suppliers to deliver product per importers' specifications low, medium or high? 3/	Medium	Medium	Medium
If price quotes for construction and structural wood products are available, identify the leading source(s)	N/A	N/A	N/A
1/ If other than equal, explain in report text. 2/ If "other", then explain in report text. 3/ If low or medium, explain in report text.			

<b>STRATEGIC INDICATOR TABLE 2: FURNITURE &amp; INTERIORS MARKET</b>			
Country: Japan Report Year: 2003	Previous Calendar Year	Current Calendar Year	Following Calendar Year
Total Housing Starts (number of units)	1,151,016	1,150,000	1,160,000
Total Number of Households (1,000 households)	48,015	48015	48015
Furniture Production (\$US million) -Wooden (1)	1,853	1,850	1,800
Interiors Market Size (\$US million) (2)	5,540	5,300	5,200
Total Furniture Imports (\$US million) (3)	2,151	2,100	2,000
Total Furniture Exports (\$US million) (4)	416	410	400
Are tariffs on hardwood from the United States higher, equal or lower than hardwood imported from other countries? 1/	Equal	Equal	Equal
Are non-tariff barriers on hardwood from the United States higher, equal or lower than hardwood imported from other countries? 1/	Equal	Equal	Equal
Are there market development programs for furniture or interiors market expansion funded by foreign governments?	No	No	No
If yes, identify the following:			
--Country(ies) 2/	-	-	-
--Form(s) of competition: Export subsidy, trade show, trade servicing, permanent market representative (number), permanent office (location), or other. 3/	-	-	-
--Estimated annual market expansion outlay (\$US million) by country	-	-	-
From Post's experience, is the willingness of U.S. suppliers to deliver product per importers' specifications low, medium or high? 4/	Medium	Medium	Medium
If price quotes for furniture and interiors products are available, identify the leading source(s)	-	-	-
1/ If other than equal, explain in text. 2/ If more than one country, report each country individually. 3/ If "other", explain form of subsidy in text. 4/ If low or medium, explain in text.			

## Notes:

- (1) Covers the following "wooden" products, as classified in the Japanese Government (METI) statistics.  
-Chest of drawers (wardrobes, Japanese-style cabinet of drawers, or Tansu, Cabinets of drawers), Dressers, including mirror stands, Shelves (cupboards, other shelves), Desks, Tables, Chairs (sofas, dining chairs, etc.), Beds, System cabinets, other furniture, etc.
- (2) Includes the following "metal" furniture in addition to "wooden" furniture.  
-Desks and tables, Chairs, Filing cabinets, Storage cabinets, Fire-retardant containers, Kitchen furniture (e.g. Sink cabinets, range tables, cooking tables, system kitchens), Beds, Racks, Partitions, etc.
- (3) Covers products under the following HS (Harmonized System) tariff codes in full 9-digits / customs clearance basis.  
-9401.40-61-69-30-40-50-80-71-79-90  
-9403.30-40-50-60-10-2070-80-90
- (4) Covers products under the following HS (Harmonized System) tariff codes in full 9-digits/ customs clearance basis.  
-9401.40-000, 9401.61-000, 9401.69-000, 9403.30-000, 9403.40-000, 9403.50-000, 9403.60-000, 9401.30-000, 9401.71-000, 9401.79-000, 9403.10-100, 9403.10-900, 9403.20-100, 9403.20-900, 9401.50-000, 9401.80-000, 9403.70-000, 9403.80-000, 9401.90-000, 9403.90-000.

<b>STRATEGIC INDICATOR TABLE 3: FOREST PRODUCT TARIFFS AND TAXES (percent)</b>						
Country: Japan Report Year: 2003	Product Description	Tariff Current Year	Tariff Following Year	Other Import Taxes or Fees 1/	Total Cost of Import	Export Tax
4401.21-22	Wood Chips	Free	Free	5.0	5.0	None
4403.10-20	Softwood Logs	Free	Free	5.0	5.0	None
4403.10.210-230	Temperate HW Logs	Free	Free	5.0	5.0	None
4403.91-92	Temperate HW Logs	Free	Free	5.0	5.0	None
4403.99.190-110-210-290- 310-390.	Temperate HW Logs	Free	Free	5.0	5.0	None
4403.10.220	Tropical HW Logs	Free	Free	5.0	5.0	None
4403.41-49	Tropical HW Logs	Free	Free	5.0	5.0	None
4404	Split poles/Piles, etc.	5.0-7.5	5.0-7.5	5.0	10.0-12.5	None
4405	Wood wool, flour	2.5	2.5	5.0	7.5	None
4406	Railway sleepers	Free	Free	5.0	5.0	None
<b>4407.10. Softwood Lumber &lt; 160mm; Thickness</b>						
-110; Pinus spp. Abies spp.	Picea spp; Planed	4.8	4.8	5.0	9.8	None
-121; Pinus spp.	Not planed	4.8	4.8	5.0	9.8	None
-129;	Other species	4.8	4.8	5.0	9.8	None
-210; Genus Larix	Paned or sanded	8.0	8.0	5.0	11.0	None
-290; Genus Larix	Not planed or sanded	10.0	10.0	5.0	11.0	None
4407.91-92	Temperate HW Lbr.	Free	Free	5.0	5.0	None
4407.99.100-210-290-400-500	Temperate HW Lbr.	Free	Free	5.0	5.0	None
4407.24; Tropical HW Lbr.	Virola, Mahogany	Free	Free	5.0	5.0	None
4407.25-26-29; Trop.HW Lbr.	Meranti, Lauan, etc.	6.0	6.0	5.0	11.0	None
4407.99.310-390	Tropical HW Lbr.	6.0	6.0	5.0	11.0	None
4408.10	Softwood veneers	5.0-6.0	5.0-6.0	5.0	10.0	None
4408.31; Meranti	Hardwood veneers	5.0-6.0	5.0-6.0	5.0	10.0	None
4408.39; Padok, Jeltong, Teak	Hardwood veneers	5.0-5.6	5.0-5.6	5.0	10.0-10.6	None
4408.90; Tsuge, Tagayasan, etc.	Hardwood veneers	5.0-5.6	5.0-5.6	5.0	10.0-10.6	None
4409.10; Softwood	Drawn wd, mouldings	3.6-5.0	3.6-5.0	5.0	8.6-10.0	None
4409.20; Non-Softwood	Drawn wd, moldings	Free-5.0	Free-5.0	5.0	5.0-10.0	None
4410.11-19; Particleboard,	Waferboards, OSB	5.0-6.0	5.0-6.0	5.0	10.0-11.0	None
4410-90; Other boards/sheets	Wood materials	6.6-7.9	6.6-7.9	5.0	11.6-12.9	None
4411.11-19; Fiberboard	Density >0.8g/cm3	2.6	2.6	5.0	7.6	None
<b>4412.13 Plywood, veneered panels &amp; similar laminated wood.</b>						
-119	Hardwood Plywood	10.0	10.0	5.0	15.0	None
-122	Hardwood Plywood	8.5	8.5	5.0	13.5	None
-219	Hardwood Plywood	6.0	6.0	5.0	11.0	None
-229	Hardwood Plywood	6.0	6.0	5.0	11.0	None
4412.14.011; Tangué/groove	Hardwood Plywood	6.0	6.0	5.0	11.0	None
4412.14.019; Others	Hardwood Plywood	6.0	6.0	5.0	11.0	None

4412.19.011; Tang./groove	Softwood Plywood	6.0	6.0	5.0	11.0	None
4412.19.019; Others	Softwood Plywood	6.0	6.0	5.0	11.0	None
4412.22; With 1 trop. ply	Laminated Lumber	6.0	6.0	5.0	11.0	None
4412.23; With 1 particlebd.	Laminated Lumber	6.0	6.0	5.0	11.0	None
4412.29-92-93-99; Oths	Laminated Lumber	6.0	6.0	5.0	11.0	None
4413.00	Densified Wood	7.0	7.0	5.0	12.0	None
4414.00	Wooden Frames	3.2	3.2	5.0	8.2	None
4415; Crates, Pallets,	Packing cases, boxes	2.8	2.8-3.9	5.0	7.8-8.9	None
4416.00; Casks, barrels,	Vats, Tubs, etc.	2.2	2.2	5.0	7.2	None
4417.00; Tools, Tool bodies	Tool Handles, Broom	2.2-2.8	2.2-2.8	5.0	7.7-7.8	None
4418; Builder's Joinery &	Carpentry of Wood	Free-5.0	Free-5.0	5.0	7.0-10.0	None
4419.00; Tableware &	Kitchenware of Wood	2.7-4.7	2.7-4.7	5.0	7.7-9.7	None
4420; Wood Marquetry &	Inlaid Wood, caskets	Free-10.0	Free-10.0	5.0	7.7-15.0	None
4421; Other Articles of	Wood (e.g., hangers)	Free-3.9	Free-3.9	5.0	7.9-8.9	None
9406.00; Prefabricated	Buildings & Parts	Free	Free	5.0	5.0	None
1/ Japanese domestic consumption tax, applicable to all goods and products sold in Japan.						

## Forest Situation

Following the decline in demand for houses, demand for lumber and wood products is also down. According to the Ministry of Agriculture, Forestry and Fisheries (MAFF) Forestry Agency data, the National Forest Service, which manages public lands, reported revenue of 269 billion yen against costs of 267.9 billion yen. Despite net revenues of 1.1 billion yen, net operating losses were 52 billion yen and total liabilities were 1,232 billion yen, as of the end of fiscal year (FY) 2001 (March 2002), up 41 billion yen from the previous year.

As a result of depressed standing timber values and a weak domestic log market, private forest and timberland owners also fared poorly. During FY 2001, the gross revenue for forest owners dropped 8.1% from the previous year, to 979,900 yen, while expenses declined only 5% to 766,500, from the previous year. While net revenues were 213,400 yen, this was down 17.9% from the previous year.

## Production

### Logs

Japan's total log supply to the wood manufacturing industry was 30,902,000 cubic meters (m<sup>3</sup>) in 2002, down 5.2% from the previous year. The total volume supplied consisted of 15,092,000 m<sup>3</sup>, 48.8%, for domestic logs and 15,810,000 m<sup>3</sup>, 51.2%, of imported logs. This was down 4.3% and 6.0% from the previous year for domestic and imported logs, respectively.

Of the total 15,092,000 m<sup>3</sup> of logs sourced from domestic timber, 82.3%, 12,420,000 m<sup>3</sup>, were softwood, and 17.7%, 2,672,000 m<sup>3</sup>, were temperate hardwood. This is down 3.3% and 8.7% from the previous year, for softwood and temperate hardwood logs, respectively.

Of the total logs imported in 2002, 13.6%, 2,159,000 m<sup>3</sup>, were tropical hardwood from the

South Seas, and the rest, 40.5%, 6,412,000 m<sup>3</sup>, from North America, 31.7%, 5,019,000 m<sup>3</sup>, from Russia, and 10.4%, 1,641,000 m<sup>3</sup>, from New Zealand, were softwood logs. The volume of hardwood logs was down 7.2%, while softwood from North America, Russia, and New Zealand were down 9.3%, 3.9% and 5.1%, respectively, from the previous year.

### Lumber

Approximately 590 mills closed in 2002, bringing the total in production to 10,429. Domestic Lumber production in 2002 was 14,060,000 m<sup>3</sup>, down 7.3% from the previous year. Year-to-date production through June 2003 was 6,887,000 m<sup>3</sup>, up 31,000 m<sup>3</sup> from the same period last year.

The volume of logs supplied to wood manufacturing mills in 2002 was 22,321,000 m<sup>3</sup>, down from 23,879,000 m<sup>3</sup> in the previous year. Of total log supply, 49.9%, 11,142,000 m<sup>3</sup>, came from domestic forests. North American softwood species accounted for 57% of the remainder.

### Plywood

Domestic plywood production in 2002 was 2,735,000 m<sup>3</sup>, down slightly from 2,771,000 m<sup>3</sup> in the previous year. Of this total, the traditional hardwood plywood production, slicing imported tropical hardwood logs for veneers, accounted for 51% and softwood plywood production, while peeling imported softwood logs as lamstock, such as Russian larch, radiata pine from New Zealand and Chile, and domestic species, accounted for the remainder. Responding to competition from imports of manufactured tropical hardwood plywood from Indonesia and Malaysia, Japanese plywood producers continued to shift to softwood plywood production.

The year-to-date plywood production through June 2003 was 1,441,000 m<sup>3</sup>, up 10.8% from the same period last year. This opportunity for growth is in part a response a result of the domestic plywood industry's ability to meet the requirements for testing under the recent revision of the Building Standards Law (BSL) requiring testing for formaldehyde.

There were 306 veneer and plywood mills in 2002, down 23 from the previous year. The volume of logs delivered to these mills, grew 1.6% from the previous year to 4,724,000 m<sup>3</sup> in 2002. Approximately 94%, 4,445,000 m<sup>3</sup>, logs for plywood come from imported wood species.

### Glulam (Glue-laminated Wood Products)

Japanese laminated wood production in 2002 was a record 1,172,800 m<sup>3</sup>, up 14.0% from the previous year. This is largely a result of the continuing growth in market demand from homebuilders for structural glulam to meet the need for dried and dimensionally stable lumber to meet the requirements of the revised BSL and the performance standards in the Housing Quality Assurance Act (HQAA).

Production of structural glulam products is growing. In 2002, structural glulam stock's share of total production was 80.6%, up from 75.8% in the previous year. Use of non-structural glulam, typically for aesthetic and decorative applications in traditional Japanese Tatami-mat rooms of post and beam construction, is decreasing. This is principally the result a trend towards western style rooms in new houses.

Japan's Laminated Wood Production By Year (1000 m <sup>3</sup> / % Change: Yr. /Yr.)
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Product / Year	2000	2001	2002
Non-Structural	269.7 (- 5.6%)	248.5 (- 7.9%)	227.1 (-8.6%)
Structural Stock	622.3(+28.7%)	781.6 (+25.6%)	945.7(+21.0%)
Total Production	892.0(+16.4%)	1,030.1(+15.5%)	1,172.8(+13.9%)
Production Value 1/ 2/	1,567 (+7.1%) \$1.3 billion	1,556 (-0.8%) \$1.29 billion	1,534 (-1.5%) \$1.28 billion

(Source: Japan Laminated Wood Industry Association)

1/ Unit of Measurement: 100 Million Yen.

2/ US \$ value, based on the exch. rate of 120 Yen / US\$.

### Particleboard/Fiberboard Products (MDF/Insulation Boards)

Production of particleboard in 2002 was 1,235,560 m<sup>3</sup>, down 1.6% from 1,255,650 m<sup>3</sup> in the previous year. Totaled distribution was 75,871,000 m<sup>2</sup>, down 3.4%, with 60% of the stock going into furniture and interiors and 36% going into building materials in housing and construction.

MDF (Medium Density Fiberboard) production also fell in 2002, from depressed demand for interior building products in the residential and industrial markets. While the industry production declined 5% to 410,195 m<sup>3</sup> in 2002, shipments were up 2.3% to 49,086,000 m<sup>2</sup>, compared to the previous year, suggesting changes in use patterns.

Due to continued weaknesses in their traditional markets, such as automotive dashboards, industrial crates and Tatami underlayment in Japanese houses, domestic production of hardboard and insulation board products declined. Hardboard production was 64,359 m<sup>3</sup> and insulation board production 386,594 m<sup>3</sup>. Both were down 12% from the previous year.

Fiberboard Productions By Year in Japan				
Product Line	2001 (m <sup>3</sup> )	% Change *	2002 (m <sup>3</sup> )	% Change *
Particleboard	1,255,650	+/- 0%	1,235,560	- 1.6%
Hardboard	73,102	- 7.9%	64,359	- 12%
MDF	432,678	- 3.2%	410,195	- 5.2%
Insulation Board	439,110	- 6.9%	386,594	- 12%
Total:	2,200,540	- 2.6%	2,096,708	- 4.7%

(Source: Ministry of Economy, Trade & Industry)

\*Percent changes from the previous year.

### Composite Wood Flooring

According to the Japanese Composite Wood Flooring Manufacturers' Association, composite wood flooring production in 2002 was approximately 645,02,000 m<sup>2</sup> (17,917,000 Tsubo), down 10% from the previous year. Production during the first half of 2003 was 30,608,000 m<sup>2</sup> (8,502,000 Tsubo), down 6% from the same period last year. This decline is the result of both decreased housing starts and companies marketing solid temperate hardwood flooring in response to customer preferences. While both quality and price competitiveness remain a factor for successful marketing in this sector, it promises to be a worthwhile target for U.S. solid temperate hardwood products.

### Wood Consumption

Domestic lumber distribution in 2002 was 14,402,000 m<sup>3</sup>, down 7.0% from the previous year. This decline resulted from the decline in Japanese housing starts to 1.151 million and general effect of the recession on the demand for wood products.

Industry's Lumber Shipments by Year

Vol.\Year	1998	1999	2000	2001	2002
Volume (000 m3)	18,875	18,165	17,231	15,485	14,402
% Change (Yr./Yr)	-14%	-4%	-5%	- 10.1%	-7.0%

(Source: Ministry of Agriculture, Forestry and Fisheries)

Year-to-date lumber shipments through June 2003 were 6,818,0000 m3, down 4.1% from the same period last year. As a result of continued economic difficulties, distribution is expected to remain depressed during the remainder of this year.

Plywood shipments in 2002 posted their first increase since 1999. Distribution was 2,718,000 m3 and production volume was 2,735,000 m3 in 2002, up 2.6% and 3.3%, respectively, from the previous year.

Industry's Plywood Shipments & Production by Year (000 m3: % Change)					
	1998	1999	2000	2001	2002
Shipments	3,240 (-18.3%)	3,247 (+0.2%)	3,112 (-4.2%)	2,648 (-14.9%)	2,718 (+2.6%)
Production	3,267 (-23.2%)	3,261 (-0.2%)	3,218 (-1.3%)	2,771 (-13.9%)	2,735 (+3.3%)

(Source: Ministry of Agriculture, Forestry & Fisheries)

In response to demand shifts to JAS approved and formaldehyde tested product, the year-to-date plywood shipments through June 2003 were 1,367,268 m3, up 6.7% from the same period of last year.

## Market Sector Analysis

### Construction Sector

Japanese housing starts in 2002 were 1,151,016 units, down 1.9% from the previous year. Economic recession and deflation in the real estate and housing markets reduced building activities as many prospective homebuyers took a wait-and-see attitude to buying or building a new home.

Probably as a result of a ramp-up in housing starts in advance of implementation of the sick house regulations, for the first time in months, the year-to-date housing starts through June 2003 were up, 0.2%, to 566,793, from the same period a year earlier. Market observers have concluded that while the market remains bearish, homebuyers are beginning to respond to low housing prices and loan rates.

Japanese Housing Starts in 2002 & Year-to-date Performance in 2003 (Units)				
Sector	2002	% Change (02/01)	Jan. - Jun. 2003	% Change (02/01)
Total Starts	1,151,016	- 1.9%	566,793	+ 0.2%
Custom housing	367,974	- 4.9%	186,280	+ 0.7%
Rental housing	450,092	+ 2.7%	218,044	+ 3.2%

Corporate housing	9008	- 7.8%	5,080	+ 13.1%
Built-for-sale	323,942	- 4.4%	157,389	- 4.4%
Wood-Framed	503,761	- 3.6 %	257,021	+ 6.2%
<b>Wood Share</b>	<b>43.8%</b>	-	<b>45.3%</b>	-
By Framing Method				
-Condominiums	208,114	- 3.3%	95,356	- 12.5%
-Prefab. Housing (Wood-framed)	160,871 (23,744)	- 2.7% (- 12.7 %)	76,980 (11,173)	+ 3.0% (- 3.2%)
2x4 Wood -framed	78,988	+ 2.3%	37,375	+ 4.2%
By Floor Space (1,000 square meters)				
Total Housing Starts	8,098	+ 3.2%	51,389	- 2.4%
Wood-Framed	4,322	- 2.1%	28,064	+ 3.2%
<b>Wood Share</b>	<b>53.4%</b>	-	<b>54.6%</b>	-

(Source: Ministry of Land, Infrastructure & Transport)

While overall housing starts dropped 1.9% in 2002, the prefabricated housing starts were off 2.7%. Steel framed buildings dominated the prefabricated market with an 81.8% share.

Japan's Prefabricated Housing Starts			
Framing Technology	2002		Market Share
	Units	% Change (02 / 01)	
Steel -Framed	131,605	- 0.4%	81.8%
Wood- Framed	23,744	- 12.7%	3.4%
Steel-framed / Concrete- Reinforced structures	5,522	- 6.2%	14.8%
<b>Total Starts:</b>	<b>160,871</b>	<b>- 2.7%</b>	<b>100%</b>

(Source: Ministry of Land, Infrastructure & Transport)

Lumber distribution in the housing construction and public/civil works sectors dropped 7% in 2002, from the previous year. The share of lumber sold to these two sectors, however, increased from 85% to 85.3% in 2002, as shown below.

Lumber Consumption in the Housing & Construction Sector (Unit: 100,000 m3)					
Sector\Yr.	1998	1999	2000	2001	2002
Housing	151	146	138	126	117
Civil works	7.6	7.2	7.0	6.1	5.8
					122.8

Total	158.6	153.2	145	132.1	
%Change 1/	-13%	- 4 %	- 5%	- 9%	- 7.0%
% Share 2/	84%	84%	84%	85%	85.3%

(Source: Ministry of Agriculture, Forestry and Fisheries)

Notes: 1/ Year-on-year percent change.

2/ Percentage share in the industry's total lumber shipments.

### 3-Story Wood-framed Residential Construction

In 2002, there were 19,029 3-story wood-framed housing starts, down 17.2% from the previous year. Of these, 10,963 buildings or 57.6% were built in quasi-fire protection districts, mostly densely populated urban areas, such as Tokyo, Osaka and Nagoya.

Building methods were, conventional Japanese post & beam, hybrid, consisting of blended framing methods and materials, wood-framed platform, and prefabricated housing, with market shares of 64.5%, 17.4%, 15.1% and 2.1%, respectively.

Multi-family, 3-storied wooden housing starts were 175 buildings, up 17.7% from the previous year. Of these, 54, 31%, were built in the quasi-fire protection districts, an increase of 7.7% from the previous year.

### Furniture & Interiors Sector

Japanese imports of furniture and associated component parts in 2002 were down 1.7% to \$2.1 billion from the previous year. Wood furniture imports declined 7.3%, from \$690 million in 2001 down to \$640 million in 2002. China, Thailand, Malaysia, Italy and Indonesia were the leading wood furniture suppliers, accounting for 75% of the market share of imports.

The share of imported furniture purchased has increased, in part because of the high-cost of domestic manufacturing and the increasingly value conscious consumer. Furniture imports have also increased as houses increasingly have western style rooms. Furniture manufactured outside Japan is not appropriate for Japanese style rooms, but as new homes increasingly have western style rooms, these rooms accommodate high quality cost-competitive imports.

In response to growth high quality cost-competitive imports, Japanese furniture manufacturers have shifted significant production offshore. This has left management decisions continuing to be made in Japan while taking advantaged of production efficiencies in developing countries.

Japanese wood furniture exports in 2002 grew 12.8% from the previous year to \$416 million, with the 5 top destinations, the U.S., South Korea, China, Taiwan and Hong Kong, accounting for 70% of the export value.

Lumber Consumption in the Furniture & Interiors Sector (000 m3)					
Volume\Year	1998	1999	2000	2001	2002
Volume	503	417	368	313	255
% Change 1/	-22%	-17%	-12%	- 14.9%	-18.5%
% Share 2/	2.7%	2.3%	2.1%	2.0%	1.8%

(Source: Ministry of Agriculture, Forestry and Fisheries)  
 Notes: 1/ Year-on-year percent change.  
 2/ Percentage share in the industry's total lumber shipments.

### Material Handling Market

Radiata pine, imported from New Zealand and Chile, and off-grade stock of domestic species, such as cedar and larch, are the key species marketed in this sector. While lumber use in this sector declined 3.3% in 2002, compared with the previous year, the share of lumber use rebounded to 10.7%. Declines are in part the result of depressed industrial activities as well as Japanese manufacturing moving offshore.

Lumber Consumption in the Material Handling Sector (000 m3)					
Volume\ Year	1998	1999	2000	2001	2002
Volume	1,946	1,871	1,862	1,588	1,536
% Change 1/	-15%	-4%	-0.5%	-14.7%	- 3.3%
% Share 2/	10.3%	10.3%	10.8%	10.3%	10.7%

(Source: Ministry of Agriculture, Forestry and Fisheries)  
 Notes: 1/ Year-on-year percent change.  
 2/ Percentage share in the industry's total lumber shipments.

### Sick House Syndrome

On July 1, 2003, the Ministry of Land, Infrastructure and Transportation (MLIT) implemented new regulations restricting the emission of volatile chemical substances. The requirements include testing for formaldehyde on a variety of products, including plywood, particleboard, laminated veneer lumber, laminated wood products, finger-jointed lumber, wood window sashes and doors. Testing will be covered under Japan Agricultural Standards (JAS), regulating most wood products, Japan Industrial Standards (JIS), regulating most industrial materials, and the under the BSL, for products not covered by JAS or JIS.

The new regulatory framework was instituted in response to concerns about sick house syndrome, human health disorders that new homebuyers report resulted from excessive emission of volatile chemical substances in building and furniture products. Three major components of the new regulations are:

- Regulation of chlorpyrifos and formaldehyde and an expectation that the list will expand
- A total ban on the use of chlorpyrifos
- Limitations on the usage of formaldehyde based on the emission level, and test requirements from accredited third-party testing bodies.

The following resources provide information in English and Japanese.

Foreign Commercial Service: Advisory to U.S. exporters of building products to Japan  
<http://www.buyusa.gov/japan/en/page147.html>

Building Center of Japan: Overview of Countermeasures Regarding Sick House Issues under the Amended Building Standard Law

<http://www.bcj.or.jp/sickhouseissue/introduction.html>

BSL & Sick House Countermeasure Information Center

<http://www.mlit.go.jp/jutakukentiku/build/sick.html>

Housing Information Center

<http://www.sumai-info.jp>

Housing Quality Assurance Information Center-"Help Desk" for Compliance with Legal Requirements of the Housing Quality Assurance Law

<http://www.mlit.go.jp/jutakukentiku/house/torikumi/hinkaku/hinkaku.htm>

Housing Performance Evaluation Organizations Council

<http://www.hyouka.gr.jp>

## Trade Highlights

### The Market in Review

Structural glulam imports were more than 500,000 m3 for the first time in 2002. The record 516,062 m3 was up 3.6% from the previous year. Of this, 84%, 433,599 m3, was from Europe. This was up 13.4% from 2001. Meanwhile, the U.S. share was 3.8%, 19,841 m3, in 2002, down 35% from the previous year. The top 5 suppliers were Austria, Finland, Sweden, Germany and Russia.

Japanese imports of softwood lumber and manufactured wood products from Europe during the first half of 2003 (January-June) were 1,484,020 m3, up 36.4% from the same period last year. Finland, Sweden, Austria, Germany were the leading suppliers, accounting for 92% of the total volume.

Japanese imports of particleboard, OSB (Oriented Strand Board), and waferboard in 2002 was a record 404,595 m3. Approximately 50.2%, 203,444 m3, was OSB and waferboard. Imports of hardboard and MDF (Medium Density Fiberboard) were down 11% to 509,249 m3 from the previous year.

Japanese furniture imports in 2002, including furniture of steel, wood and other materials (e.g., plastic) and accessory parts, grew 12.8% from the previous year to \$416 million. This was due to imports of plastic furniture, and furniture parts, which grew 70% and 16.6% respectively, from the previous year. In contrast, imports of manufactured steel and wood furniture declined 14% from the previous year.

#### REFERENCES

- 1) Japanese industry and commodity statistics in this report are based on the following data, published periodically by calendar year by the Statistics and Information Bureau of the Japanese Ministry of Agriculture, Forestry and Fisheries.
  - Report on the Basic Raw Material Statistics in the Wood Industry.
  - Report on the Basic Lumber Industry Statistics.
  - Report on the Annual Plywood Industry Statistics.
  - Report on the Wood Chip Statistics.
- 2) Trade data for Japanese imports and exports are based on the customs clearance statistics of the Japanese Ministry of Treasury. The U.S. dollar value is based on the CIF value on the customs clearance basis.
- 3) HS (Harmonized System) tariff codes used in each grouping of forest product commodities in the trade matrices are as follows.
  - (1) Softwood Logs:  
(**Import**) 4403.10-100; 4403.20: (**Export**) 4403.20-000.
  - (2) Temperate Hardwood Logs:  
(**Import**) 4403.10-210; 4403.91-000; 4403.92-000, 4403.99-110; 4403.99-190, 4403-99-390, (**Export**) 4403.92-000, 4403-99-000
  - (3) Tropical Hardwood Logs:  
(**Import**) 4403.10-220; 4403.10-230; 4403.41; 4403.49, 4403-99-210. 4403.99-290; 4403.99-310, 4403.99-391; 4403.99-392; 4403.99-399. (**Export**) 4403-41-000

- (4) Wood Chips: **(Import)** 4401.21; 4401.22 (Export) 4401.21-000; 4401.22-000
- (5) Softwood Lumber: **(Import)** 4407.10; **(Export)** 4407.10-000
- (6) Temperate Hardwood Lumber:  
**(Import)** 4407.91-000; 4407.92-000; 4407.99-500: **(Export)** 4407.91, 4407.91-900;  
4407.92-000
- (7) Tropical Hardwood Lumber:  
**(Import)** 4407.24-000; 4407.25; 4407.26; 4407.29; 4407.99-100; 4407.99-100;  
4407.99-210; 4407.99-290, 4407.99-310; 4407.99-390, 4407.99-400; 4407.99-390;  
4407.99-400, **(Export)** 4407-24-000, 4407-26-000, 4407.29-000, 4407-99-200, 4407.99-  
300
- (8) Hardwood Plywood: **(Import)** 4412.13; 4412.14: **(Export)** 4412.13-100; 4412.13-900,  
4412.14-900; 4412.14-100
- (9) Softwood Plywood: **(Import)** 4412.19-011; 4412.19-019; 4412.19-021, 4412.19-022,  
**(Export)** 4412.19-022